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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/517,765 | 02/03/2006 | Takashi Ozaki | 040509 | 6791 |
| 23850 7590 07/24/2009 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005 | | | | |
| EXAMINER | | | | |
| MCCALL SHEPARD, SONYA D | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2813 | | | | |
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| 07/24/2009 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,765

Applicant(s)

OZAKI ET AL.

Examiner

Sonya D. McCall-Shepard

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Objections

1. Claim 24 is objected to because of the following informalities: the word "mountain" in line 5, page 4 is relative. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

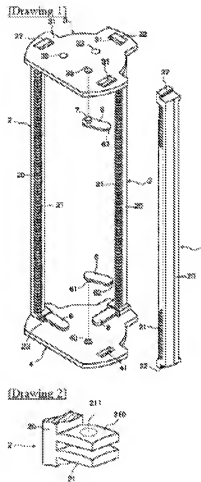
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 9, 19 to 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda (JP 2000-106349).

With regard to claim 9, Okuda discloses a substrate treating apparatus comprising a substrate support member 2 for supporting substrates in a processing chamber, wherein said substrate support member has multiple holding members installed vertically, each of said holding

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members has multiple support grooves, each of said support grooves contains a support section 211, to contact said substrate, and a receiving section 210 formed below said support section and extending outwards from a section of the outer periphery of said support section (figs. 1 and 2).



Okuda is silent to a processing chamber, however one having ordinary skill in the art at the time the invention was made would recognize that it would be obvious to use the support member of Okuda in a processing chamber, more specifically a heat treatment chamber in order to form an oxide on the substrate as suggested by Okuda in paragraph 0002.

Okuda is silent to a receiving section extends outwards to 6 mm or more from a section of the outer periphery of said support section, this is *prima facie* obvious without showing that the claimed ranges achieve unexpected results relative to the prior art range. In *re* Woodruff 16 USPQ2d 1935, 1937 (Fed. Cir. 1990). See also In *re* Huang, 40 USPQ2d 1685, 1688 (Fed. Cir. 1996) (claimed ranges, are unpatentable unless they produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art). See also In *re* Boesch, 205 USPQ 215 (CCPA) (discovery of optimum value of result effective variable in known process is ordinarily within skill of art) and In *re* Aller, 105 USPQ 233 (CCPA 1955) (selection of optimum ranges within prior art general conditions is obvious). One of ordinary skill in the art at the time of the invention would recognize that it would be obvious to optimize variables to achieve desired support capabilities.

With regard to claims 19-21, Okuda does not explicitly teach the length of the receiving section. These claims are *prima facie* obvious without showing that the claimed ranges achieve unexpected results relative to the prior art range. In *re* Woodruff 16 USPQ2d 1935, 1937 (Fed. Cir. 1990). See also In *re* Huang, 40 USPQ2d 1685, 1688 (Fed. Cir. 1996) (claimed ranges, are unpatentable unless they produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art). See also In *re* Boesch, 205 USPQ 215 (CCPA) (discovery of optimum value of result effective variable in known process is ordinarily within skill of art) and In *re* Aller, 105 USPQ 233 (CCPA 1955) (selection of optimum ranges within prior art general conditions is obvious). One of ordinary skill in the art at the time of the invention would recognize that it would be obvious to optimize variables to achieve desired support capabilities.

With regard to claims 22-29, Okuda discloses the claimed invention but does not explicitly teach the shapes of the support and receiving section. These claims are prima facie obvious without showing that the claimed modification would achieve unexpected results relative to the prior art design. In re Rose, 105 USPQ 237 (CCPA 1955) (change in size or shape is ordinarily within skill of art). One of ordinary skill in the art at the time of the invention would recognize that it would be obvious to optimize shapes to achieve desired support capabilities.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya D. McCall-Shepard whose telephone number is 571-272-9801. The examiner can normally be reached on Monday - Friday 8:30-5:00 E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Landau can be reached on 571-272-1731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. D. M./
Examiner, Art Unit 2813

/W. David Coleman/
Primary Examiner, Art Unit 2823